

## ABSTRACT

A system and method for acquiring seismic data are disclosed. The system comprises a controller for causing the generation of a seismic signal, where the controller  
5 has a first clock used for time-stamping a record of the generated seismic signal. A seismic receiver is deployed in a wellbore so as to detect the generated seismic signal. An atomic clock is disposed in or with the seismic receiver for time-stamping a record of the detected seismic signal. The atomic clock is synchronized with the first clock prior to being placed downhole.

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